

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2005/000356

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7 C12N 15/63**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean patents and applications since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKIPASS, Delphion, NCBI PubMed

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/108937 A1 (BIOLEADERS CORPORATION) 16 December 2004 (2004-12-16) See the whole document.	1-20
A	WO 2003/014360 A1 (BIOLEADERS CORPORATION) 20 February 2003 (2003-02-20) See the whole document.	1-20
A	MAKOTO ASHIUCHI, ET. AL. "A Poly- $\gamma$ -glutamate Synthetic System of Bacillus subtilis IFO3336: Gene Cloning and Biochemical Analysis of Poly- $\gamma$ -glutamate Produced by Escherichia coli Clone Cells." In: Biochem. Biophysic. Res. Commun., (Sep. 2001) Vol.263(1):6-12, see the whole document.	1-20
A	G. HOBORN, ET. AL. "OmpA fusion proteins for presentation of foreign antigens on the bacterial outer membrane." In: Dev. Biol. Stand., (1995) Vol.84:255-62, see the whole document.	1-20
A	A. CHARBIT, ET. AL. "Expression of a poliovirus neutralization epitope at the surface of recombinant bacteria: first immunization results." In: Ann. Inst. Pasteur Microbiol., (Jan.-Feb. 1988) Vol.139(1):45-58, see the whole document.	1-20
A	J. COTE-SIERRA, ET. AL. "A new membrane-bound OprI lipoprotein expression vector. High production of heterologous fusion proteins in gram(-)bacteria and the implications for oral vaccination." In: Gene, (Oct. 1998) Vol.221(1):25-34, see the whole document.	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search

16 MAY 2005 (16.05.2005)

Date of mailing of the international search report

**20 MAY 2005 (20.05.2005)**

Name and mailing address of the ISA/KR



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## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of :

a. type of material

- ☒ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☒ in written format  
☒ in computer readable form

c. time of filing/furnishing

- ☒ contained in the international application as filed  
☒ filed together with the international application in computer readable form  
☐ furnished subsequently to this Authority for the purposes of search

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/KR2005/000356

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004/108937 A1	15.12.2004	None	
WO 2003/014360 A1	20.02.2003	US 20040253704 A1 JP 2005500054 T2 EP 1421195 A1	16.12.2004 06.01.2005 26.05.2004